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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,075	05/12/2005	Jean-Christopher Duclos	072691-015	7598
33401 7590 09/28/2007 MCDERMOTT WILL & EMERY LLP 2049 CENTURY PARK EAST 38th Floor LOS ANGELES, CA 90067-3208			EXAMINER PLUMMER, ELIZABETH A	
			ART UNIT 3635	PAPER NUMBER
			MAIL DATE 09/28/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/522,075

Applicant(s)

DUCLOS ET AL.

Examiner

Elizabeth A. Plummer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | • Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Preliminary amendments to the specification and claims received 01/21/2005 have been received and entered. Claims 1-8 are pending. This is a first Office action on the merits for application serial number 10/522,075 filed 05/12/2005.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Objections

3. Claim 4 is objected to because of the following informalities: "tens" appears to be a grammatical error. Examiner suggests amending the word to read "tenths". Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

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regards as the invention. Regarding claim 4, the phrase, "on the order of one to a few tens of millimeters" renders the claim indefinite.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Martin (US Patent 5,471,905). Regarding claim 1, Martin discloses a sandwich structure for protecting a fixed or mobile installation or equipment, said sandwich structure comprising an inner layer (120) and an outer plate (110), the outer plate made of a very ductile material (abstract; column 3, lines 45-48), fixed at a distance from the inner layer (Fig. 1), and designed to resist the first impacts of projectiles (abstract), the inner layer being made from a very hard material to stop projectiles that passed through the outer plate (column 45, lines 45-46), the outer plate having a constant thickness (Fig. 1) and being fixed on the inner layer using spacers (supports of core sheet 130 between landings 132,134).

7. Claims 1, 3, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lanz (EP 1182420A1).

a. Regarding claim 1, Lanz discloses a sandwich structure (Fig. 1, 2a) for protecting a fixed or mobile installation or equipment, said sandwich structure comprising an inner layer (1) and an outer plate (2) made of a very ductile

material (paragraphs 21,22,23), fixed at a distance from the inner layer (Fig. 1,2a) and designed to resist the first impacts of projectiles (paragraph 1) and the inner layer being made from a very hard material to stop projectiles that passed through the outer plate (paragraphs 1,2,3), the outer plate having a constant thickness and fixed on the inner layer using spacers (9,16).

b. Regarding claim 3, the structure further comprising conducting elements (13) placed between the outer plate (2) and inner layer (1) to provide electrical continuity between the plates.

c. Regarding claim 6, each spacer (9,16) is provided with a threaded bore designed to hold an attachment screw (12) fixing the outer plate onto the spacer.

d. Regarding claim 7, each spacer is provided with a threaded bore designed to hold an attachment screw (10) fixing the spacer onto the inner layer and an attachment screw (12) fixing the outer plate onto the spacer.

Claim Rejections - 35 USC § 103

8. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (US Patent 5.471,905).

a. Regarding claim 4, Martin discloses the invention as claimed except for the spacing between the outer plate and the inner layer being between one to a few tenths of a millimeter. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a structure within the claimed range, as it has been held that where the general conditions of

a claim are disclosed in the prior art, discovering the optimum or working ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

b. Regarding claim 5, Martin discloses the invention as claimed except to the inner layer comprising steel and the outer plate comprising aluminum. However, it would have been a matter of obvious design choice to form the inner layer out of steel and the outer layer out of aluminum, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (US Patent 5,471,905) in view of Ladika et al. (US Patent 5,663,520).

a. Regarding claim 2, Martin discloses that an energy absorbing material can be inserted between each of the spacers and the outer plate in order to enhance the properties of the sandwich structure in stopping projectiles (column 3, lines 15-45). Martin does not disclose that the energy absorbing material can be an elastic element. However, it is notoriously well known in the art of sandwich structures that sandwich structures can include an elastic element between a spacer and outer plate. For example, Ladika et al. teaches a sandwich structure (Fig. 1,8) for protecting a fixed or mobile installation or equipment, said sandwich structure comprising an inner layer (114) and an outer plate (46), the outer plate being fixed to the inner plate by a space (246) and an elastic element (264) inserted between the outer plate and the spacer (Fig. 8) in order to absorb blast

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forces from projectiles (column 10, lines 1-16). It would have been obvious to one of ordinary skill in the art to modify the energy absorbing material of Martin to include an elastic element, such as taught by Ladika et al., in order to create a structure that can better absorb and dampen impact from projectiles.

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lanz (EP 1182420A1). Lanz discloses the invention as claimed except for the spacers being tubular. It would have been a matter of obvious design choice to form the spacers as a tubular shape, as such a modification would have involved a mere change in shape of a component. A change in shape is generally recognized as being within the level of ordinary skill in the art. In re Dailey, 149 USPQ 47 (CCPA 1966).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Plummer whose telephone number is (571) 272-2246. The examiner can normally be reached on Monday through Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on (571) 272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JEANETTE CHAPMAN/
PRIMARY EXAMINER
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